Federal Democratic Republic of Ethiopia

EDICT OF GOVERNMENT

In order to promote public education and public safety, equal justice for all, a better informed citizenry, the rule of law, world trade and world peace, this legal document is hereby made available on a noncommercial basis, as it is the right of all humans to know and speak the laws that govern them.

ET ISO 6442 (2005) (English): Door leaves -- General and local flatness -- Measurement method

ISO INSIDE

BLANK PAGE

BRUTUM FULMEN

IGNORANTIA JURIS NON EXCUSAT

PROTECTED BY COPYRIGHT

ETHIOPIAN
STANDARD

ES ISO 6442:2012

First edition

Door leaves — General and local flatness — Measurment methods

Identical with ISO 6442:2005

ICS: 91.060.50

Published by Ethiopian Standards Agency

©ESA

Foreword

This Ethiopian Standard has been prepared under the direction of the Technical Committee for Building structures and elements of building (TC 41) and published by the Ethiopian Standards Agency (ESA).

The standard is identical with ISO 6442 Door leaves — General and local flatness — Measurement method published by International organization for Standards (ISO).

For the purpose of this Ethiopian Standard , the adopted text shall be modified as follows.

- The phrase “International Standard” shall be read as “Ethiopian Standard”; and
- A full stop (.) shall substitute comma (,) as decimal marker.

1 Scope

This standard can be applied to all rectangular door leaves.

The standard specifies the method to be used to measure the deviations in general and local flatness of door leaves.

In this standard the concept of local flatness deviation is limited to defects considered to be prejudicial to the appearance of the door leaf.

2 Apparatus

2.1 Measurement equipment for general flatness

A vertically mounted rigid frame on which is attached four reference points forming a rectangular reference plane, appropriate to the size of door leaf to be tested.

A straight reference bar capable of spanning the height of the door leaf.

A dial or digital gauge accurate to 0,01 mm, or feeler gauges.

2.2 Measurement equipment for local flatness

A dial or digital gauge accurate to 0,01 mm mounted at the centre of a 200 mm long straight reference bar.

> NOTE : For non-laboratory testing (e.g. on site) it is acceptable to use a 200 mm long straight reference bar and feeler gauges.

3 Test specimens

Test specimens shall be stored and tested in a non-destructive environment within the ranges of 15 °C to 30 °C and 25 % to 75 % relative humidity.

4 Procedure

4.1 General flatness measurement of twist

Position the reference points to occur (20 ± 5) mm in from the edges of each corner of the door leaf, when mounted with its long edges horizontal.

Place the door leaf vertically on a long edge against the reference plane so that without restraint it makes contact with three corners of the reference plane. Measure the deviation of the fourth corner of the door leaf from the fourth corner of the reference plane, to the nearest 0,1 mm.

4.2 General flatness measurement of bending

With the door leaf mounted vertically, position the straight reference bar along the face of the door leaf, parallel to and not more than 20 mm in from one edge. Measure the maximum deviation of the face of the door leaf from the reference bar, to the nearest 0,1 mm.

Repeat the procedure for the other edges of the door leaf.

4.3 Local flatness measurement

The door leaf is to be supported without restraint.

With the 200 mm long reference bar and dial or digital gauge, measure any visually apparent deviations from local flatness on the face of the door leaf, to the nearest 0,05 mm.

Repeat the procedure for the other face of the door leaf.

NOTE : The test may be carried out with the door leaf in the horizontal or vertical plane.

5 Expression of results

Record :

- the measured value of twist and maximum deviations in bending for each edge of the door leaf ;

- the position and measured value of any apparent deviations in local flatness for each face of the door leaf.

6 Test report

The test report shall contain the following information :

a) reference to this standard ;

b) all necessary details to identify the door leaf ;

c) all relevant details concerning the type, specified dimensions, materials, form and construction of the door leaf ;

d) laboratory storage and testing conditions ;

e) the results expressed as in clause 5 ;

f) name of testing laboratory ;

g) date of test.

©ESA

የኢትዮጵያ የደረጃዎች ኤጀንሲ
Ethiopian Standards Agency

Organization and Objectives

The Ethiopian Standards Agency (ESA) is the national standards body of Ethiopia established in 2010 based on regulation No. 193/2010.ESA is established due to the restructuring of Quality and Standards Authority of Ethiopia (QSAE) which was established in 1970.

ESA's objectives are:-

- Develop Ethiopian standards and establish a system that enable to check weather goods and services are in compliance with the required standards,
- Facilitate the country's technology transfer through the use of standards,
- Develop national standards for local products and services so as to make them competitive in the international market.

Ethiopian Standards

The Ethiopian Standards are developed by national technical committees which are composed of different stakeholders consisting of educational Institutions, research institutes, government organizations, certification, inspection, and testing organizations, regulatory bodies, consumer association etc. The requirements and/ or recommendations contained in Ethiopian Standards are consensus based that reflects the interest of the TC representatives and also of comments received from the public and other sources. Ethiopian Standards are approved by the National Standardization Council and are kept under continuous review after publication and updated regularly to take account of latest scientific and technological changes.
Orders for all Ethiopian Standards, International Standard and ASTM standards, including electronic versions, should be addressed to the Documentation and Publication Team at the Head office and Branch (Liaisons) offices. A catalogue of Ethiopian Standards is also available freely and can be accessed in from our website.

ESA has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of ESA.

International Involvement
ESA, representing Ethiopia, is a member of the International Organization for Standardization (ISO), and Codex Alimentarius Commission (CODEX). It also maintains close working relations with the international Electro-technical Commission (IEC) and American Society for Testing and Materials (ASTM).It is a founding member of the African Regional Organization for standardization (ARSO).

More Information?
Contact us at the following address.
The Head Office of ESA is at Addis Ababa.

☎ 011- 646 06 85, 011- 646 05 65
📠 011-646 08 80
✉ 2310 Addis Ababa, Ethiopia
E-mail: info@ethiostandards.org,
Website: www.ethiostandards.org

Standard Mark

DRAFT